

		TRUSS DESIGN						
STRUCTURE	SPAN (mm)	DEPTH (mm)	CHORD SIZE ①	WEB ANGLE SIZE (mm)	PANELS (NO. & LENGTH)	WEB BOLT SIZE	TRUSS CONN. ②	CAMBER (mm)

		GUSSET PLATE DESIGN						
STRUCTURE	SPAN (mm)	THICK- NESS	BACK TRUSS	FRONT TRUSS	CENTER FRONT	BACK TRUSS END PLATE	FRONT TRUSS END PLATE	WELD SIZE

- ① OUTSIDE DIAMETER (O.D.) X WALL THICKNESS IN MILLIMETERS.
- ② NUMBER OF A325 19 MM ϕ BOLTS PER CONNECTION.
(NOTE: ONE TRUSS HAS FOUR CONNECTIONS.)
- ③ "HEIGHT" IS MEASURED FROM ϕ TRUSS TO BOTTOM OF BASE PLATE.
LEFT AND RIGHT SIDES ARE WITH RESPECT TO THE DIRECTION VIEWED
FROM AS SHOWN ON "SIGN BRIDGE LAYOUT" SHEET.

		UPRIGHT DESIGN		
STRUCTURE	SPAN (mm)	"HEIGHT" (mm) ③		UPRIGHT SIZE ①
		LEFT	RIGHT	

- NOTES
- DESIGN IS TO BE BASED ON THE FOLLOWING:
1. MAXIMUM SIGN DEPTH = 3650 mm

2. SIGN AREA EQUAL TO (6 X SPAN) X 3650 mm HIGH.

3. NO CATWALK.

4. ONE DIRECTION TRAFFIC (SIGNS ON ONE SIDE).

5. NO FUTURE WIDENING OR RAISING OF STRUCTURE PLANNED.

6. TYPE 1 SIGN PANELS (EXTRUDED ALUMINUM SECTIONS WITH REFLECTIVE BACKING) & ALUMINUM BRACKETS.

7. DESIGN 4 CHORD SYSTEM (PER STANDARD 39.2 & 39.3) WHEN ANY OF CRITERIA (1) THROUGH (6) ARE VIOLATED.

8. SIGNS TO BE CENTERED ON TRUSS.

9. DESIGNER IS TO PROVIDE DESIGN (FILL IN DESIGN VARIABLE BOXES IN TABLE ABOVE AND AS SHOWN ON STANDARDS 39.5 & 39.6) FOR EACH SIGN BRIDGE STRUCTURE. OTHER DETAILS SHOWN IN STD. 39.5 & 39.6 ARE ADEQUATE PROVIDED THE CRITERIA SHOWN ABOVE AND IN THE BRIDGE MANUAL ARE FOLLOWED.

10. STRUCTURE IS ANALYZED AS A SPACE FRAME WITH CHORDS BEING CONSIDERED CONTINUOUS MEMBERS PINNED TO THE UPRIGHT BRACKETS. WEB MEMBERS ARE CONSIDERED PINNED AT ENDS BUT ARE DESIGNED FOR ECCENTRIC END CONNECTIONS.

3-CHORD STEEL SIGN BRIDGE
DESIGN VARIABLES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DEVELOPMENT SECTION

APPROVED: _____

DATE:
1/99